

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001651

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. 7: A61M 16/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
DWPI IPC A61M, A62B & keywords: target, phase, function and similar terms

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,532,957 B2 (BERTHON-JONES) 18 March 2003 column 10 lines 54 to 58, column 12 lines 10 to 24, column 3 lines 22 to 32	9-16, 23-40, 49-52, 59-62, 71-79, 82-84, 90-92, 95-97, 102-111
X	WO 2001/019440 A1 (RESMED LTD) 22 March 2001 Abstract	9, 12, 13, 16, 23, 26, 27, 35, 49, 59, 71, 77, 82, 90, 95, 102, 107
A	EP 1 086 716 A2 (SIEMENS) 28 March 2001 Abstract	
A	EP 1 346 743 A1 (WEINMANN MED) 24 September 2003 Abstract	

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Further documents are listed in the continuation of Box C

☒

See patent family annex

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
11 January 2005

Date of mailing of the international search report
17 JAN 2005

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001651

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

First invention Claims 1-8, 17-22, 41-48, 53-58, 63-70

Second invention Claims 9-16, 23-40, 49-52, 59-62, 71-85, 90-97, 102-111

Third invention Claims 86-89, 98-101

See extra sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001651

Supplemental Box

(To be used when the space in any of Boxes I to VIII is not sufficient)

Continuation of Box No: III

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority has found that there are different inventions as follows:

1. Claims 1-8, 17-22, 41-48, 53-58, 63-70 are directed to a method for providing ventilatory assistance including the steps of computing a measure of difference between the respiratory airflow and a target value, and delivering air to a patient at a pressure that is a function of the difference measure and the amplitude at a determined phase. It is considered that a function of the difference measure and the amplitude at a determined phase comprises a first "special technical feature".
2. Claims 9-16, 23-40, 49-52, 59-62, 71-85, 90-97, 102-111 are directed to a method of providing ventilatory assistance including the steps of computing a measure of difference between the respiratory airflow and a target value and delivering air at a pressure that is a function of the difference measure. It is considered that a function of the difference measure comprises a second special technical feature.
3. Claims 86-89, 98-101 are directed to a method of providing ventilatory assistance including the steps of determining two patient ventilation measures with different speeds of response, deriving two error signals that are a function of target values, controlling the delivered pressure based on a function of the error signals.

These groups are not so linked as to form a single general inventive concept, that is, they do not have any common inventive features, which define a contribution over the prior art. The common concept linking together these groups of claims is a method of providing ventilatory assistance including the step of computing the difference between the ventilation of the patient and a target value. However this concept is not novel in the light of WO 2001/019440. Therefore these claims lack unity *a posteriori*.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2004/001651

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
US	6532957	AU	37625/97	AU	41933/97
		CA	2263126	CA	2266454
		CA	2298553	CA	2478809
		EP	0996358	EP	1005829
		EP	1277435	JP	2001037880
		JP	2002315831	US	6152129
		US	6484719	US	6575163
		US	2002069874	US	2002148466
		US	2004074492	US	2004173212
		WO	9812965		
WO	0119440	AU	74997/00	EP	1229956
EP	1086716	JP	2001112868	US	6739336
EP	1346743	DE	10212497		
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.					
END OF ANNEX					

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